

## CE NETWORK ALTERNATIVES

Attachment D provides a summary of the alternatives studied during the road network planning process for the GP2020 Circulation Element. Following of summary description of the process used to develop and review each alternative, this section illustrates maps that describe the three alternatives.

### DEVELOPING ALTERNATIVES

During the first phase of GP2020 road network planning, the Existing/CIP was used to forecast road capacity deficiencies for build-out of the GP2020 June 2005 Land Use Map. The road network for initial testing was comprised of existing roads in the unincorporated county; along with currently (2005) scheduled and funded Capital Improvement Plan (CIP) projects. Staff presented this traffic model forecast to community planning and sponsor groups, and then worked with each community group to identify a preliminary community preference. In some cases, communities did not identify a preference up-front but instead named alternatives they wanted staff to test during the planning process.

Once a community preference network was endorsed by each planning or sponsor group, DPLU and DPW staff (and GP2020 consultants) identified two additional road network alternatives to test (Staff Alternatives #1 and #2). The primary purpose of developing three alternatives was to gain sufficient insight from the traffic model results for staff and planning groups to recommend a proposed CE road network. The road network alternatives tested by the traffic model consisted only of the number of lanes and type of median (raised, continuous left turn lane, or none). Roadway classifications were not addressed at this time.

### DESCRIPTION OF NETWORK ALTERNATIVES TESTED

The three network alternatives tested by SANDAG are discussed below and are shown as Figures D-1 (a-c) through D-3 (a-c).

- ***Preliminary Community Preference:*** Represents the community planning and sponsor groups' initial preference for the road network for their community. Generally, the planning and sponsor groups took an official position for how many lanes to classify each roadway, along with recommended new road connections and the roads to delete from the CE network (see table D-1).
- ***Staff Alternative #1:*** Road network identified by staff (and consultants) that attempts to resolve forecast LOS deficiencies identified in the Existing/CIP network when possible, but that fails to resolve forecast LOS deficiencies when other mapping criteria were considered. Generally, staff attempted to vary their recommendations from the community preference so that multiple network scenarios could be identified (see table D-2).

- **Staff Alternative #2:** A second road network identified by staff (and consultants) that attempts to resolve forecast LOS deficiencies without considering other mapping criteria. Generally this network contains more impacts more to sensitive habitat, steep topography, and existing development than Staff Alternative #1. It typically included wider roads and more new road connections than other alternatives (see table D-3).

## TEST RESULTS

As shown in Tables D-1 through D-3, the Community Preference Alternative has the lowest number of roadway miles and greatest percentage of two lane roads, but it also has the highest percentage of roads forecast at a failing level of service (LOS E/F). At the opposite extreme, Staff Alternative #2 has the greatest number of roadway miles, the greatest percentage of six-lane roadways, and the lowest overall percentage of roads operating at a failing level of service.

**Table D-1: Preliminary Community Preference — Road Network and LOS Forecast**

Number of Lanes	Total Road Network (Road Miles)				Percent LOS E/F Roads			
	North	East	Back	Total	North	East	Back	Total
<b>Two</b>	712	806	927	2,445	12%	9%	1%	7%
<b>Four</b>	180	151	23	354	32%	12%	0%	22%
<b>Six</b>	5	12	0	17	0%	15%	0%	11%
<b>Totals</b>	897	968	950	2,815	17%	9%	1%	9%

**Table D-2: Staff Alternative #1 — Road Network and LOS Forecast**

Number of Lanes	Total Road Network (Road Miles)				Percent LOS E/F Roads			
	North	East	Back	Total	North	East	Back	Total
<b>Two</b>	687	816	961	2,463	11%	8%	1%	6%
<b>Four</b>	217	143	11	371	26%	11%	0%	19%
<b>Six</b>	3	18	0	21	0%	7%	0%	1%
<b>Totals</b>	906	977	972	2,855	15%	9%	1%	8%

**Table D-3: Staff Alternative #2 — Road Network and LOS Forecast**

Number of Lanes	Total Road Network (Road Miles)				Percent LOS E/F Roads			
	North	East	Back	Total	North	East	Back	Total
<b>Two</b>	665	848	952	2,465	8%	8%	1%	5%
<b>Four</b>	224	130	11	365	26%	7%	0%	18%
<b>Six</b>	10	35	0	45	40%	17%	0%	21%
<b>Totals</b>	898	1013	964	2,875	13%	8%	0%	7%

**ALTERNATIVE MAPS**

Sub-regional maps for the three CE network alternatives are illustrated on the following pages. Each page depicts the road network tested (on the left) and the traffic model forecast (on the right). In order to view maps in greater detail, separate maps are provided for North County, East County, and Backcountry communities.

*List of Figures:*

D-1a: Preliminary Community Preference – North County Communities

D-1b: Preliminary Community Preference – East County Communities

D-1c: Preliminary Community Preference – Backcountry Communities

D-2a: Staff Alternative #1 – North County Communities

D-2b: Staff Alternative #1 – East County Communities

D-2c: Staff Alternative #1 – Backcountry Communities

D-3a: Staff Alternative #2 – North County Communities

D-3b: Staff Alternative #2 – East County Communities

D-3c: Staff Alternative #2 – Backcountry Communities